

## REMARKS

### **A. REQUEST FOR RECONSIDERATION**

Since the present amendment raises no new issues for consideration and, in any event, places the present application in better condition for consideration on appeal, it is respectfully requested that this amendment be entered under 37 CFR 1.116 in response to the last Office Action dated October 29, 2008, which made final rejections as to the pending claims. Applicants respectfully request reconsideration of the Examiner's position based on the amendments to the claims and the following remarks.

### **B. THE INVENTION**

The present invention is directed to a feed additive for domestic animals.

One of the novel aspects of the invention is that the feed additive contains a combination of a Grifola-derived substance of one or more of dried Grifola, dried Grifola powder or a Grifola extract and a yeast-derived substance. Applicants submit that none of the prior art references cited by the Examiner teach or suggest the claimed combination. It is therefore respectfully submitted that the claimed invention defines over the references cited by the Examiner.

### **C. STATUS OF THE CLAIMS**

Claims 4-13 are presented for further prosecution.

Claim 4 has been amended to more particularly recite that the feed additive improves the rate of raising domestic animals.

No new matter has been added.

### **D. PRIOR ART REJECTIONS**

Claims 4-13 were rejected as being obvious over EP 1155623 (EP '623) and JP 2000-032924 (JP '924), in view of Song et al. (US Patent No. 6,737,065) and Suzuki et al., Bulletin of Beef Cattle Science, 1005, No. 60, Pages 22-24, and further in view of JP 03-076539 (JP '539) and Protti (US Patent No. 5,536,509).

EP '623 and JP '924 teach a feed additive for animals, including a Grifola-derived substance selected from one or more of dried Grifola, dried Grifola powder, and a Grifola extract

mixed therein (see EP '623 paragraph 0010 and claims 1 and 2; JP '924 Abstract). The Examiner recognized that neither EP '623 nor JP '924 teach a yeast-derived substance added to feed additive for domestic animals. The Examiner cited JP '539 (Abstract) and Protti (Abstract) to teach adding a yeast-derived substance to a feed additive. Applicants submit that none of the references teach the criticality of a feed additive containing a combination of a Grifola-derived substance and a yeast-derived substance.

Applicants note that the combination of a Grifola-derived substance and a yeast-derived substance in a feed additive for domestic animals produces surprising and unexpected results. Specifically, the claimed combination of a Grifola-derived substance and a yeast-derived substance results in a feed additive that is surprisingly superior to the feed additive of the prior art references cited by the Examiner with respect to the rate of raising domestic animals. As discussed above, EP '623 and JP '924 do not teach a feed additive containing a yeast-derived substance. JP '539 and Protti have been cited to teach a yeast-derived substance, but these references do not teach that such an additive would improve the rate of raising domestic animals. In contrast, the claimed invention requires the presence of a yeast additive which results in a surprising and unexpected improvement in the rate of raising domestic animals. The rate of raising, as shown in Table 2 on page 11 of the present application, is a numerical value determined by the formula:

$$\frac{\text{the number of animals shipped}}{\text{the number of incoming animals}} \times 100 = \text{rate of raising.}$$

Table 2 shows the criticality of a feed additive having the combination of a Grifola-derived substance and a yeast-derived substance. The feed for the chickens of Test Group 1 contained feed additive 1, which was prepared with dried Grifola powder, as described on page 10 of the present application. The feed for the chickens of Test Group 2 contained feed additive 2, which was prepared with the claimed combination of dried Grifola powder and a dried yeast-derived substance, as described on page 10 of the present application. The chickens in the control group did not receive a feed additive having a Grifola derived substance or a yeast derived substance. The study was conducted from September to October and was evaluated as described on page 11 of the present application.

As shown in Table 2, the chickens of Test Group 2 which were fed with a feed additive as claimed, having a Grifola derived substance and a yeast derived substance, demonstrated a remarkable increase in the rate of raising as compared to the chickens fed with the feed additive having a Grifola derived substance and without a Grifola derived substance or a yeast derived substance. Specifically, the chickens of Test Group 2 demonstrated a rate of raising of 96.93%, whereas the chickens of Test Group 1 and the control group demonstrated a rate of raising of 94.96% and 90.18%, respectively. The chickens of Test Group 2 had approximately a 7% increase in the rate of raising from the control group, whereas the chickens of Test Group 1 only had approximately a 4% increase over the control group. Therefore, the chickens of Test Group 2 achieved almost twice the increase as that achieved by the chickens of Test Group 1. The chickens of Test Group 2 demonstrated a rate of raising of almost double that of the chickens of Test Group 1. It can be seen from Table 2 that the chickens fed with a feed additive having a Grifola derived substance and a yeast derived substance achieved superior results with respect to the rate of raising as compared to chickens fed with the feed additive containing only dried Grifola powder. The Examiner can appreciate the surprising and unexpected results obtained by the combination of a Grifola derived substance and a yeast derived substance of the present invention.

Respectfully, applicants submit that the teachings of EP '623 and JP '924 in combination with JP '539 and Protti would not lead one of skill in the art to expect such a dramatic increase in the rate of raising domestic animals. As shown in Table 2, Test Group 1, which like the feed additives of EP '623 and JP '924 did not include a yeast-derived substance, achieved an increase in the rate of raising that was about half of the increase obtained by Test Group 2. Moreover, there is no teaching or suggestion in EP '623 or JP '924 to improve the rate of raising domestic animals or that the addition of further additives would improve the rate of raising domestic animals. Thus, one of skill in the art would not expect that the feed additive of EP '623 and JP '924 in combination with JP '539 and Protti would yield such a dramatic improvement in the rate of raising domestic animals. Thus, one of skill in the art would not expect to combine these references and arrive at the present invention.

Song and Suzuki do not cure the deficiencies of EP '623 and JP '924 and JP '539 and Protti. Neither Song nor Suzuki teach a Grifola derived substance or a combination of a Grifola derived substance and a yeast derived substance that increases the rate of raising domestic

animals. Thus, it is respectfully submitted that the references cited by the Examiner, either alone or in combination, do not result in the claimed invention. Respectfully, the claims presented herein are patentable over the Examiner's rejection.

**E. FEES**

This response is being filed within the shortened period for response, thus no fees are believed due. If it is determined that any further fees are due or any overpayment has been made, the Assistant Commissioner is hereby authorized to debit or credit such sum to deposit account 02-2275. Pursuant to 37 C.F.R. 1.136(a)(3), please treat this and any concurrent or future reply in this application that requires a petition for an extension of time for its timely submission as incorporating a petition for extension of time for the appropriate length of time. The fee associated therewith is to be charged to Deposit Account No. 02-2275.

Respectfully submitted,

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